Vistanaut

Navigation Software for digital Nautical Charts

User Manual

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DELIUS KLASING

The **Vistanaut** software is exclusively distributed by Delius Klasing Verlag. For technical information on **Vistanaut** please contact our service hotline 0521-559 449 or send us an e-mail.

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Instructions for use

The user of the **Vistanaut** navigation system will be emphatically notified, that the conditions in the harbours and along the coasts may change often and that the editors often are not or only late notified of these changes after they have occurred. For this reason and due to his seaman's duty, the user must critically compare all information provided by the **Vistanaut** navigation system with the real conditions, in order to draw the necessary conclusions for safe navigation of a craft. The harbour maps and the detailed plans in the harbour manual are no official instructions for navigation.

The proper operation of **Vistanaut** depends on the quality of the GPS signal. The quality of the GPS signal is preset and manipulated by the operator of the GPS system. The GPS service can be terminated by the operator even without prior notice.

The digital nautical charts and the **Vistanaut** software are not intended to replace printed nautical charts!

System requirements

Operating system: Windows Vista or Windows XP with ServicePack 2

Hardware: PC with a cpu power equivalent to a Pentium 4 with 2000 MHz or higher, DirectX9.0c enabled graphics card, screen resolution: 1024 x 768 or higher, minimum 1 GByte RAM main memory, minimum 300 MB free hard disc storage, DVD drive (only required for installation), a free interface for the GPS device.

For displaying your GPS position in the digital nautical chart on board, you need a GPS receiver with NMEA 0183 interface for connection with the computer interface. You can use a hand set, a built-in device or a GPS active antenna. A connecting cable suitable for the GPS device is necessary, which is fitted with a corresponding plug on the side of the computer. If necessary, this cable may be avaiblable at your GPS dealer.

For the registration of the product, internet access with an e-mail account is required.

Installation

In order to assure the accurate display of the application, the preset Windows operating system DPI value „normal size (96 DPI)“ or „default scaling (96 DPI)“ should be retained.

When Autostart is activated, a HTML page will open after inserting the installation CD, which will perform the programs contained in the CD:



Vistanaut requires the **Microsoft .Net-Framework 2.0**. This system component is probably already installed on your computer, but also available on the installation CD or may be preferably acquired via a Microsoft update. If necessary, it must be installed prior to the installation of the **Vistanaut** application. After the installation of the .Net-Framework, the computer should

be re-started and by means of the Microsoft-Update application checked for new updates.

Microsoft DirectX should be already installed on every Windows XP SP2 or Windows Vista computer. As a precaution, this Windows system component is also available on the installation CD.

The **Microsoft Visual C++ 2005 Redistributable Package** is an additional system component, which should be already available on your computer and is only required when **Vistanaut** is intended to run with Navionics charts.

If **Vistanaut Light** is already installed on your computer, it must be de-installed before the installation of **Vistanaut**. De-install **Vistanaut Light** by means of the system control. You will find it there under the entry „Vistanaut_Setup“. After that, you can erase the folder „VistanautLight“ underneath the directory „DK_Navigation“ in your folder „My Documents“, in order to clear additional disc space. After the installation of **Vistanaut**, chart sets already installed under **Vistanaut Light** must be installed again.

After having followed all of the above mentioned instructions, you can start the **Vistanaut** installation. For this purpose, you can start the file „setup.exe“ in the top level directory of the installation CD or use the HTML page, as far as this will be acceped by your internet browser.

After opening „setup.exe“, follow the instructions of the installation program.

First start of Vistanaut software

After the first start of **Vistanaut** you can choose thelanguage in which you will use **Vistanaut**:



This setting can be modified in the **Vistanaut** treasure chest at any later time.

After that, the dialogue box for the registration of **Vistanaut** will appear.



Please follow the instructions on the screen. Without product registration, you can run **Vistanaut** only for a limited period: However, the registration is also possible at any time after the validity of the demo has expired!



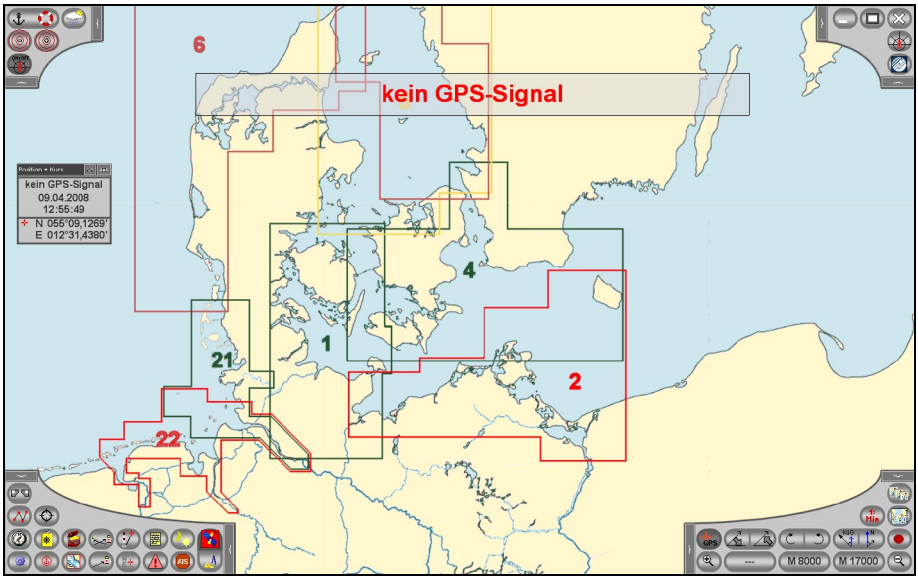
After the first start of the **Vistanaut** application, the **GPS interface** will be prompted:



The interface is to be specified as „open“, when it is not yet known at this time. This also applies for when the connection of a GPS receiver is not intended. This entry can be modified later in the **Vistanaut** system settings. In the advanced settings, the NMEA standard, the Baud rate and other parameters can be chosen. For this, please refer to the documentation of your GPS receiver. By clicking „Search GPS-Port“, you can prompt **Vistanaut** to search for the interface.

After start of Vistanaut software

After start, **Vistanaut** carries out the initialisation of the program and searches for the signal of the GPS receiver, if the COM port was not specified „open“. When no GPS signal is found, the search will be automatically terminated after some seconds and the screen changes to the following display:



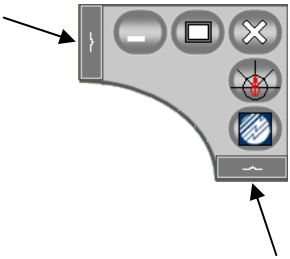
When the GPS receiver is connected, but does not send a valid position, the text „invalid GPS signal“ will appear.

In case of a valid GPS signal, the ship’s position will be marked by a superimposed ship.

The Vistanaut control panels and menus

The control panels in the corners of the screen allow the selection of all functions of the **Vistanaut** navigation system.

Each of the control panels can be hidden by clicking one of the small bars at the edges of the control panel.



After that, only a small rectangle will be displayed in the screen corner instead of of the control panel:  A click on this rectangle will show the control panel again.

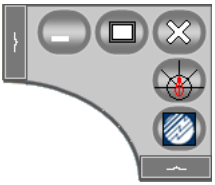
In the control panel down-left is the button  for hiding and showing both of the upper control panels.

For almost all buttons, there are also detailed **tool tips** available, which will be shown as soon as the mouse pointer pauses for a short moment over the button:



Stand-by mode, full screen mode and exiting Vistanaut

These functions can be selected via the control panel in the right upper corner of the screen:



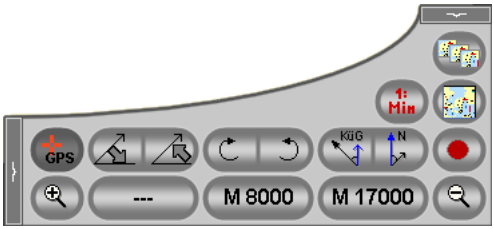
With the button  the **Vistanaut** application can be minimised, in order to show only the Windows task bar.

By clicking the button  , all control panels will be hidden and only two buttons for repeated display of the control panel and exiting of **Vistanaut** will be shown.

By clicking the button  **Vistanaut** can be exited.

Control of the chart display

The buttons for controlling the chart display can be found in the lower right control panel:



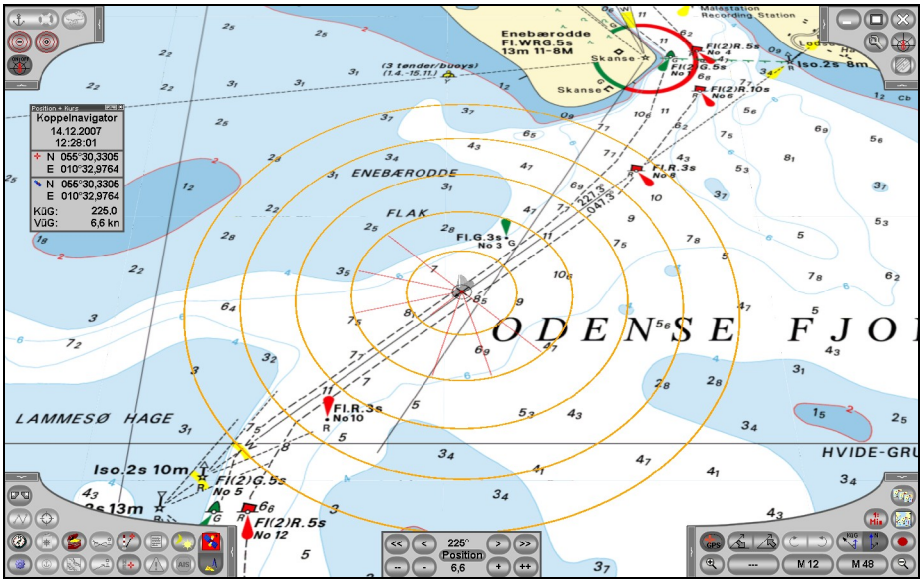
The button 

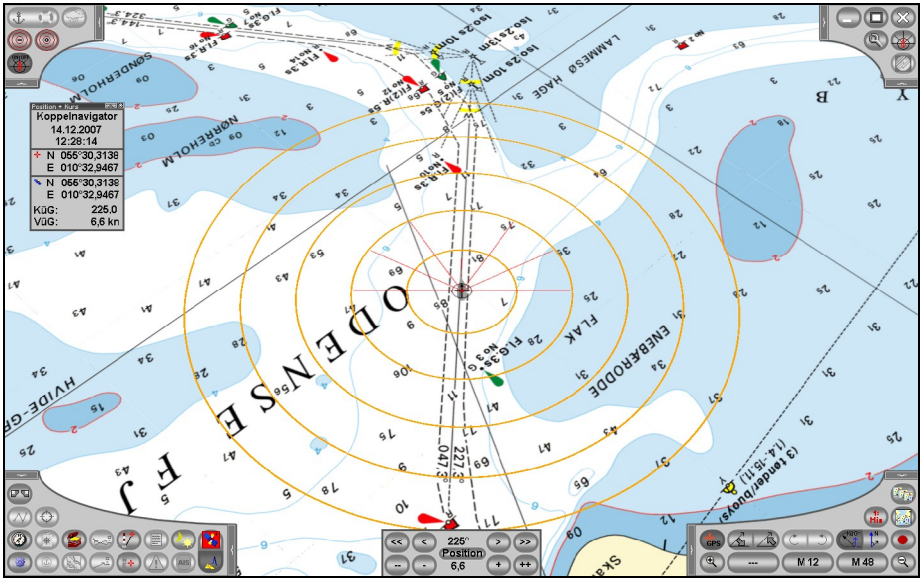
allows to control whether the displayed sectional chart should be always centered on the actual ship's position. If this button is not activated, the sectional chart can be modified by dragging the mouse when the right mouse button is pushed. A short click with the right mouse button will center the section of the clicked position. The so-selected **plan position** will be marked by a small red cross in the middle of the screen.

When the button 

is activated (this is only possible when a valid position is provided by the GPS receiver or by dead reckoning navigation), it can be determined by the buttons 

, if the chart will be displayed in northerly direction or in direction of the course over ground:


Koppelnavigator
14.12.2007
12:28:01
N 055°30,3305
E 010°32,9764
N 055°30,3306
E 010°32,9764
KüG: 225,0
VüG: 6,6 kn
ENEBÆRODDE
FLAK
ODENSE FJO
LAMMESØ HAGE
HVIDE-GRU
Enebærodde
Fl.WRG.5s
13m 11-8M
Skanse
Fl(2)R.5s
No 4
Iso.2s 8m
Fl.R.3s
No 8
Fl(2)R.10s
No 6
Fl.G.3s
No 3
Fl.R.3s
No10
Iso.2s 10m
Fl(2)G.5s
No 5
Fl(2)R.5s
No 12
225°
Position
6,6
M 12
M 48


Koppelnavigator
14.12.2007
12:28:14
N 055°30,3138
E 010°32,9467
N 055°30,3138
E 010°32,9467
KüG: 225,0
VüG: 6,6 kn
ODENSE FJ
ENEBÆRODDE
FLAK
LAMMESØ HAGE
HVIDE-GR
SØNDERHOLM
NORDERHOLM
225°
Position
6,6
M 12
M 48

With these buttons  the chart can be inclined.

With these buttons  the chart can be rotated.

The buttons marked with „M ...“ allow switching the scale of the charts. E. g. „M 120“ means, that the chart has a scale 1 : 120.000.

The middle button shows the scale of the currently visible chart.

The button on the left shows the next larger available scale. When nothing is shown on this button, it means, that at this position no chart with a larger scale is available.

The right of the three buttons shows, if there is a chart with a smaller scale available. When a button for a larger or a smaller scale is pushed, the chart on the screen will change accordingly.

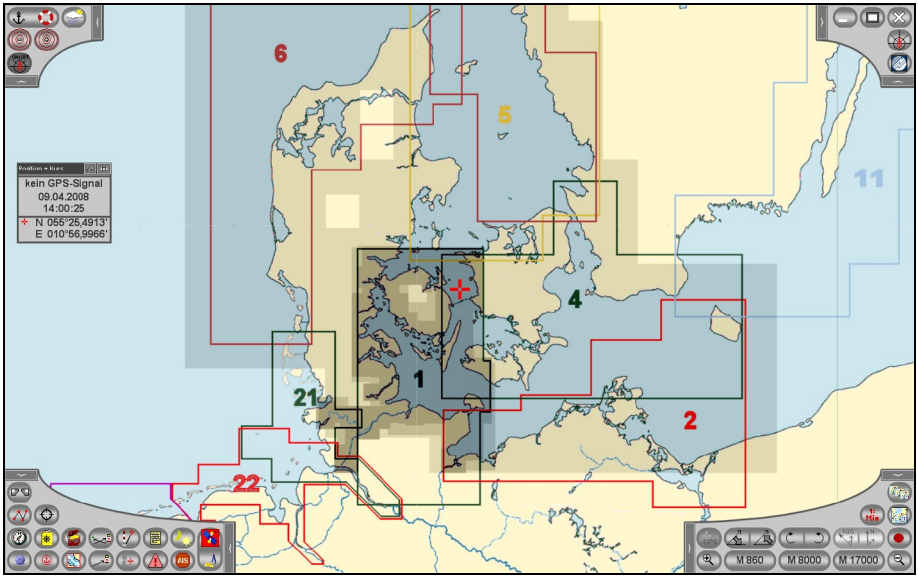
By means of the buttons  and  the chart image can be enlarged and minimised.

By clicking  , the chart will be set back in the classical vertical and azimuth-stabilised display.

By mean of the button  the chart with the largest possible scale for the actual position can be loaded immediately.

Catalogue chart and catalogue selection 

A click on  in the lower right control panel will change to the catalogue chart of the actual chart catalogue. In this catalogue, the various available Delius Klasing nautical chart sets for yachting for a region are displayed. After installation of a Delius Klasing nautical chart set for yachting, mapped areas are highlighted by shading:



The button  allows the selection of another catalogue. Initially, three catalogues are available: „World“, „Europe“ and „Western Baltic Sea“. When the application runs with Navionics charts, the buttons have a function which is slightly different (see below).

Anchor alert / man overboard (MOB) 

This button is located on the control panel at top-left:



It has a dual functionality. By pushing the button, the MOB position will be saved. The course pilot receives the MOB position as a waypoint.

This position is independant of the presently-set waypoint, or from a previously active route. The MOB functionality has highest priority. The coordinates of the MOB point will be saved in the waypoint database as a MOB point. This point is the waypoint no. 0 (“zero”) in the waypoint database. The MOB waypoint will also be automatically re-activated after re-starting **Vistanaut**. For normal navigation, the MOB waypoint must be “manually” erased from the waypoint database via the waypoint menu.

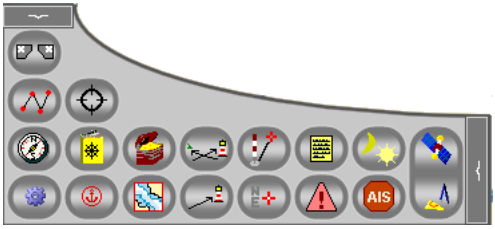
We hope that you never need this functionality. But also during normal operation this function can be helpful as anchor alert (however without an acoustic signal).

Remark: Due to the way the GPS system works, you should always take into account when using normal GPS receivers, that the failure of the determination of position may change even in short intervals by a few hundred metres. Possibly you may be piloted in a completely wrong

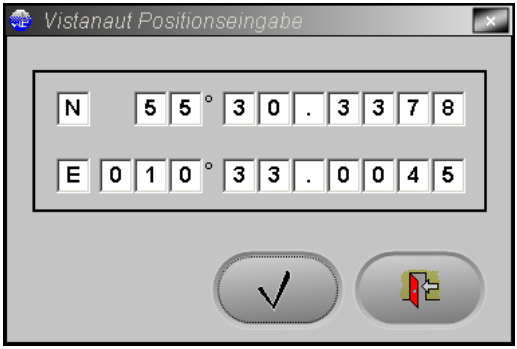
direction. When using DGPS receivers, this effect is significantly less. However, this only applies when the DGPS reception is stable.

Skip to a determined cordinate 

In the control panel at the bottom-left, different functions are available.



The button  allows an entry of the position, so that skipping to a specific position is possible and the plan position (and with it the displayed sectional chart) may be scrolled there.



GPS mode and dead reckoning navigation  

If a valid GPS signal is available, the GPS mode can be activated and deactivated by means of the button  in the lower left control panel. The GPS mode allows the determination of the ship's position, the course and the speed based on the data from the GPS receiver.

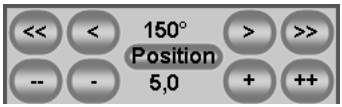
If there is no valid GPS signal available, this button opens the dialogue box for setting the GPS interface.

If there is no GPS receiver connected or the GPS signal is not available, **Vistanaut** nevertheless allows navigation of the charts according to the classical method. The dead reckoning navigation will be started via the button  in the control panel at the bottom-left. After this button is activated, an input window appears, in which the starting position can be entered with longitude and latitude: In addition, the speed over ground and the course over ground can be entered:



The starting position can also be read out directly from the chart, by clicking the starting position with the left mouse button.

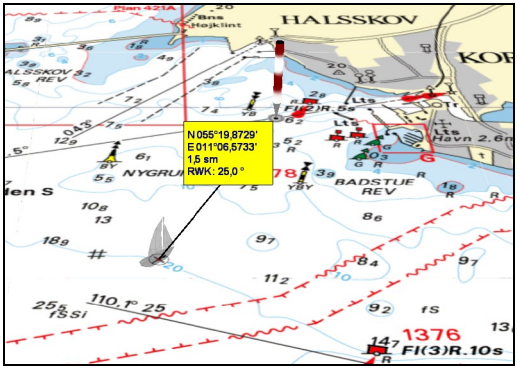
Then a steering control for coupled mode appears at the bottom of the screen. This steering control allows speed modifications by means of the „+“ and „-“ buttons.



The arrow keys allow course over ground modifications in 1° or 10° intervals. For major modifications, the mask can be opened again with the button Position, in order to enter the relevant values directly.

Measuring mode / activate bearing 

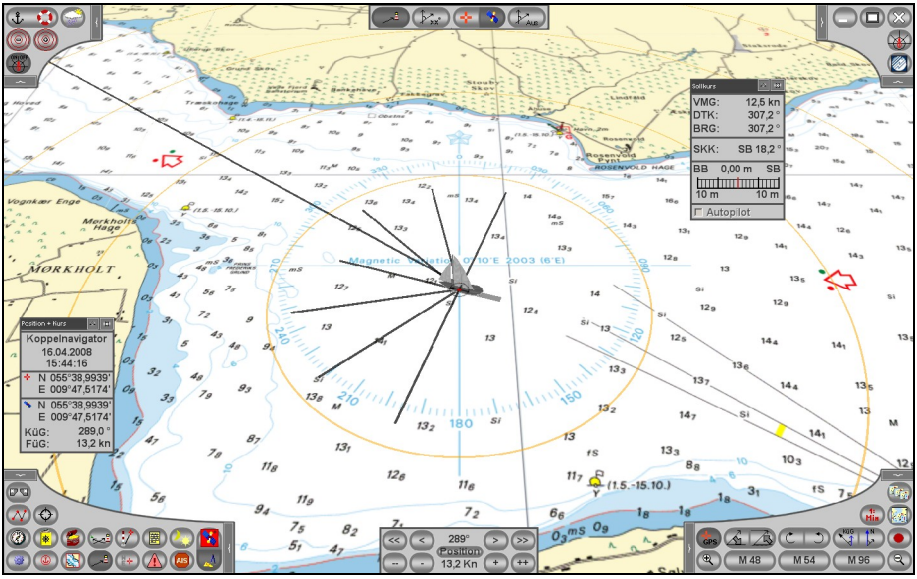
The button  in the control panel at the bottom-left allows to select a measuring point using the left mouse button. The position of the measuring point as well as the distance and course to this point will be displayed. Starting point is either the ship's or the plan position, which can be controlled via the button  in the control panel at the bottom-right.



Another simple alternative to carry out a bearing between two arbitrary objects is to plan a route (see below) from one point to the other and to let the route information be displayed.

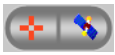
Course plotting 

At this place a course will be entered into the chart. Thereupon, this course is the given course for the course pilot (see below). A waypoint will be virtually set ad infinitum.



The button  allows to draw a course line into the chart by clicking the left mouse button.

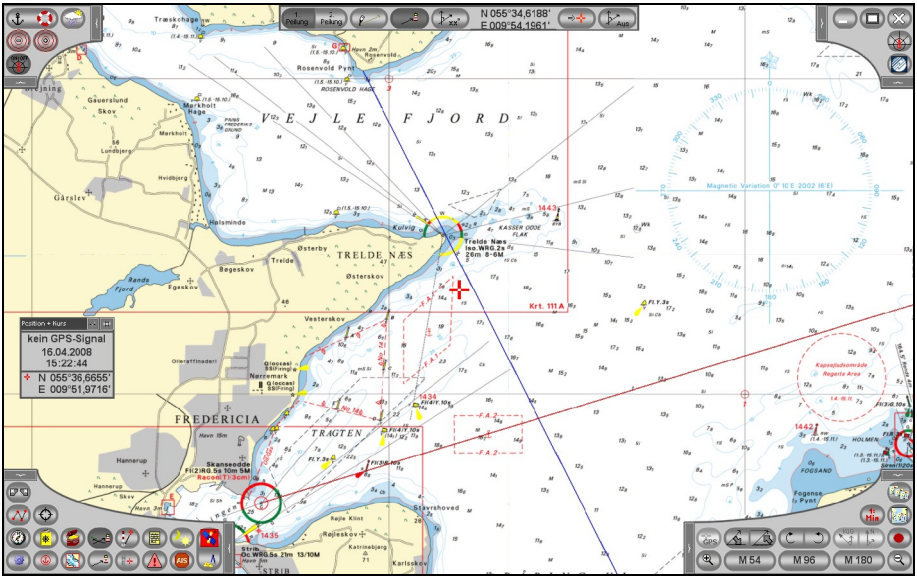
The entered course will be displayed as DTK in the info box of the steering controls, mentioning the true course. By activating the button  a mask will be opened, in which the true course can be entered directly in degrees. By means of the button  the entered course can be swiched off again.

By means of the buttons  you can select whether you wish to set the course from the plan position or from the ship's position (GPS or dead reckoning position). The colour of this course line can be defined in the operational settings.

Cross bearing 

The cross bearing can simply be carried out either only for practice or for position finding while performing the dead reckoning navigation.

After activating the button for cross bearing, a control bar appears at the upper side of the screen. Here you can switch between two bearings back and forth.

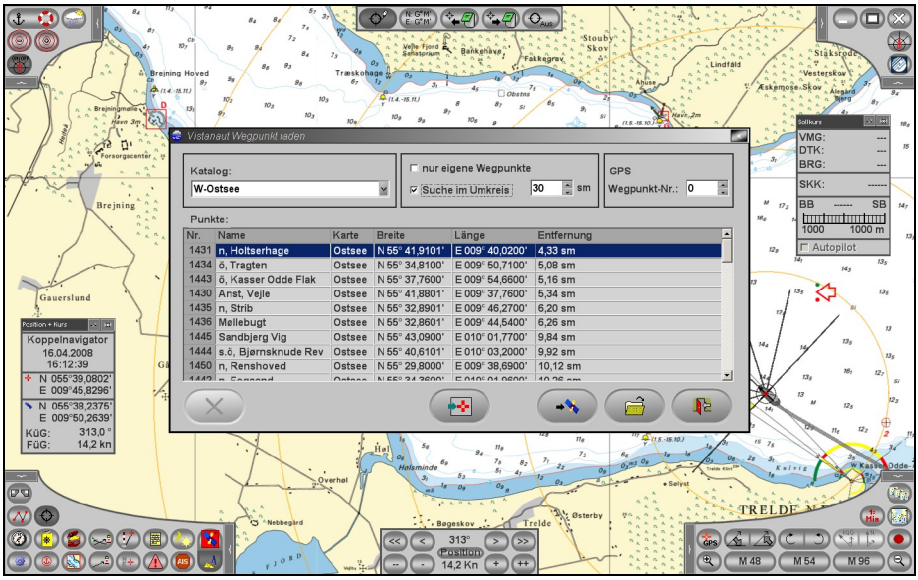


Like setting a course (see above), the located object can be entered in the chart.

By means of the button  the located position can be taken over as the new position of the ship in the dead reckoning navigation.

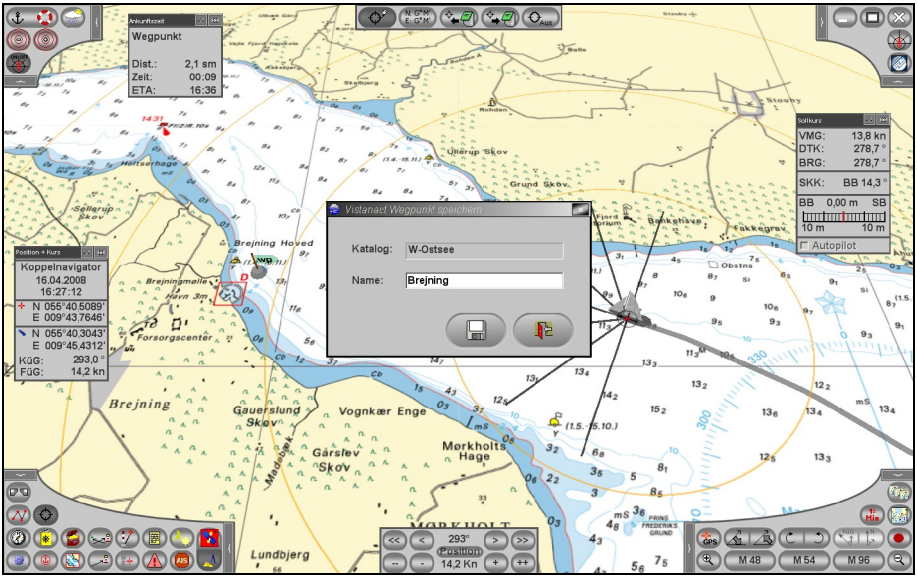
Waypoints 

Vistanaut provides a waypoint database, which will be updated by installing a Delius Klasing nautical chart set for yachting. In this database more than 1000 waypoints are saved.



These waypoints are also drawn in the charts. You can select a waypoint with the button  or set a new waypoint with the button  simply by clicking the left mouse button on the nautical chart. When you wish to set a waypoint at a specific position, the geographic position can also be entered directly via the position entry box  .

Then, by means of the button  , the waypoint can be saved and also labelled.



You can save own waypoints in any order in the waypoint database. The self defined waypoints can be erased again on demand. Erasing waypoints, which were installed by a Delius Klasing nautical chart set for yachting, is not possible.

The already existing waypoints have numbers in the range from 1000 to 24,999. The self defined waypoints have numbers starting from 25,000. The waypoint man overboard (MOB) will always be saved as waypoint no. 0 (zero).

The button 

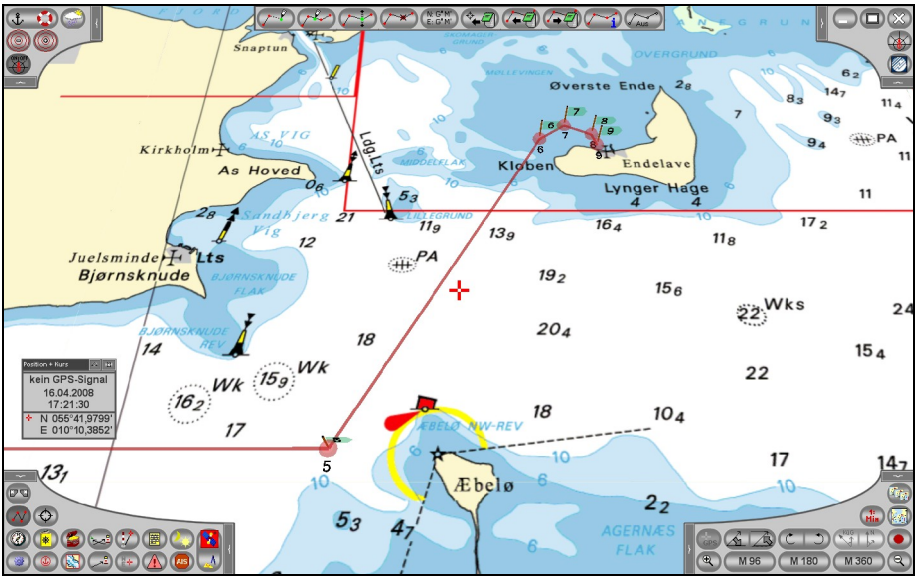
terminates the display of the selected waypoint.

The information of the selected waypoint will be transferred to the course pilot. Using the average speed, the running time until the waypoint is reached can also be defined. Current course, distance, speed and running time will be displayed from the course pilot.

Waypoints can be transmitted to the GPS while loading the waypoint  . Of course, it is a precondition that **Vistanaut** can communicate with the GPS in this manner, i. e. when this is supported by the GPS receiver.

Routing 

Vistanaut allows the creation of very complex routes in a very simple way.



The route will be determined by clicking the position in the nautical chart. The individual route points are connected by a line. In the operating mode „new waypoint“  new route points can be inserted successively. When the geographical position of a route point is known, these points can be determined directly via the position input box  .

The individual route points can be moved later  . Furthermore, route points  can be added in an existing route or also erased again  .

The created route can be saved under a freely-assignable name  . The courses and distances for the individual sections of the route will be determined automatically. Already saved routes can be loaded  and displayed anytime.

The route can also be reversed while saving and loading. This means, starting and arrival point will be inter-changed. Loaded routes can be simply modified like newly created routes and saved with a new name in the modified form.

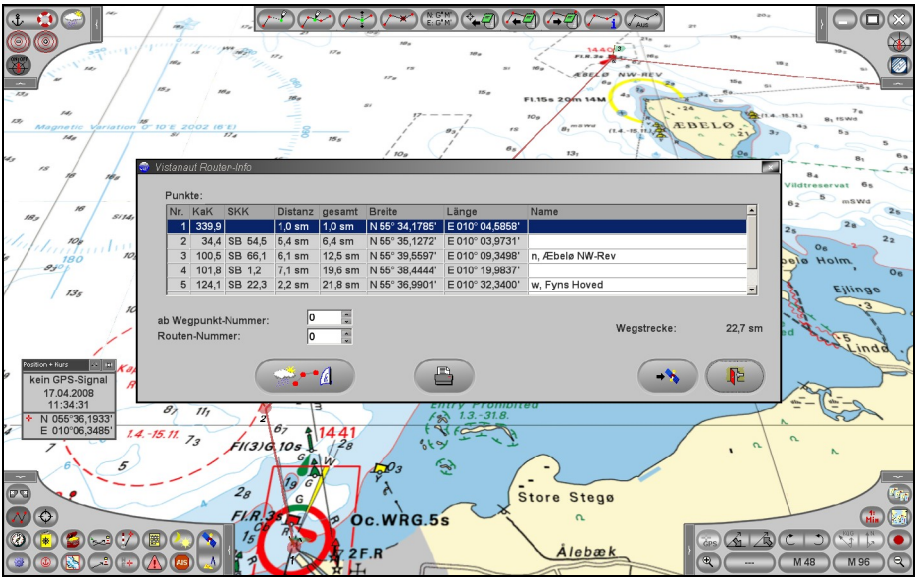
Thehe mask „load route “  also provides the possibility to erase a route. For loading and erasing, the route has to be selected first with the mouse from the displayed list.

A route can be also sent directly to the GPS receiver while loading – provided that the GPS receiver supports this functionality.

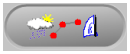
By means of the button 

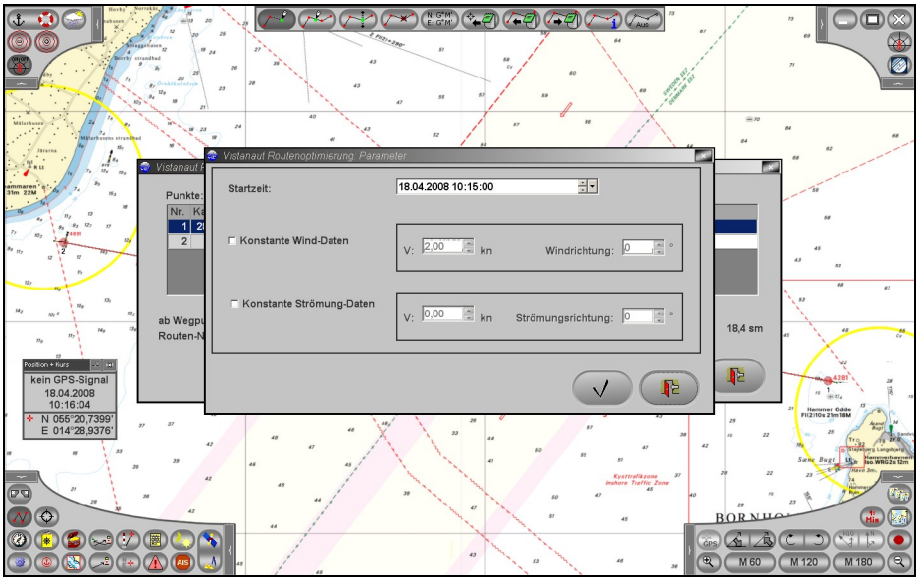
a route can be hidden again. Caution: the route must be saved before, otherwise its information will be lost!

The already defined waypoints and course sections can be shown  in a planning box. In the display mask, the individual waypoints of a route can be named. These names will then be saved along with the route. While in navigation mode, the names of the waypoints will be displayed in the respective windows of the course pilot.



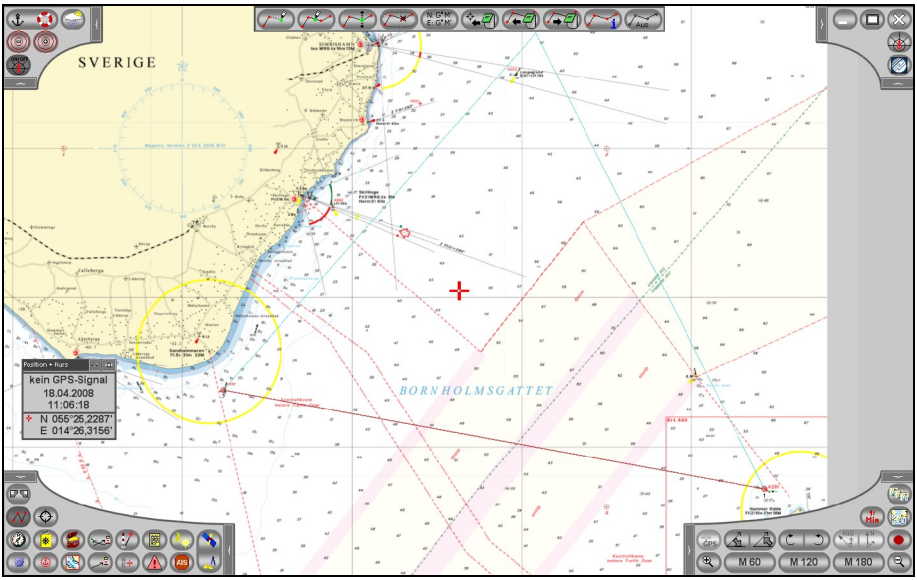
By means of the button  , a PDF file of the route can be created. The button  transmits the waypoints to the GPS – provided that the GPS receiver will support this. Here it is possible to state, from which waypoint this should be done.

The button  in the info box allows to carry out a route optimisation for a sailing boat, depending on wind and stream data as well as the actually selected polar coordinate diagram (see below). Hereby, you can either revert to existing GRIB weather data or state constant values for wind and stream:



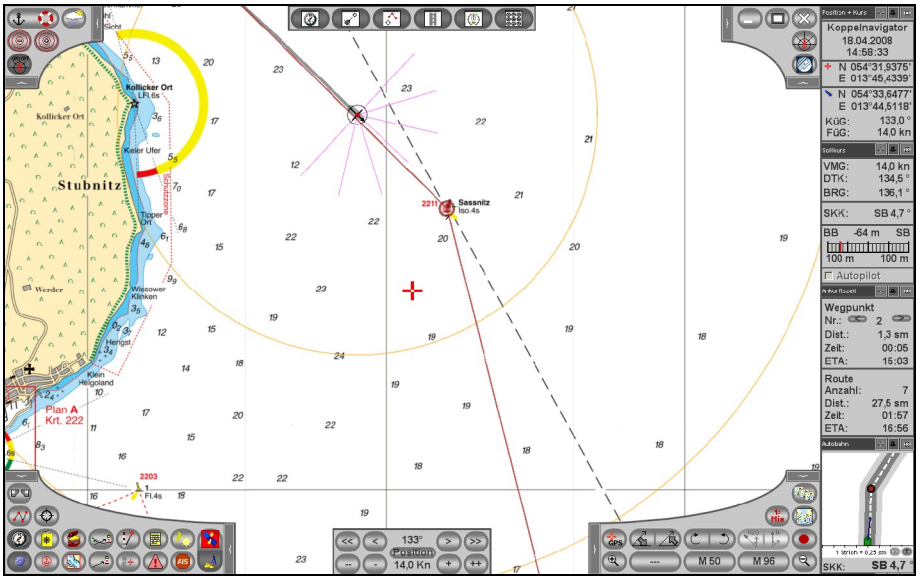
If, for example, only GRIB weather data, but no stream data are available, then the checkmark at „constant wind data“ has to be deactivated, and for the constant stream (if not known) a speed of 0 kn has to be stated.

However please note, that such a route optimisation due to the dynamic conditions of wind and stream only makes sense for short route sections or routes! Furthermore, the nautical information about landmasses, shallows, prohibited areas etc. remains unconsidered! The optimised route will be highlighted in light blue in the chart display:


SVERIGE
BORNHOLMSGATTET
kein GPS-Signal
18.04.2008
11:06:18
N 055°25,2287'
E 014°26,3156'
M 60
M 120
M 180

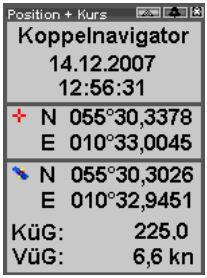
Course pilot and instruments 

The course pilot can be retrieved by means of the button  in the lower-left control panel. It appears as a bar at the lower or the right side of the screen. This depends on the preset screen resolution. The information displayed by the course pilot depends on the selection of instruments.



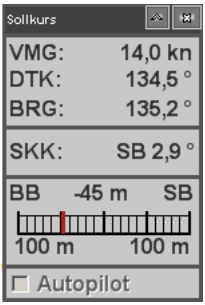
The selection of the instruments is carried out by clicking  . A control panel appears at the upper side of the screen, by which the following instruments can be activated and deactivated:

Position and course 



This instrument shows the positions of the plan position and the ship. If applicable, course and speed over ground will be stated in addition.

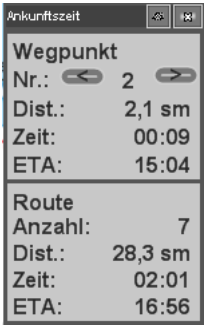
Given course 



When a route is activated, the following information will be displayed:

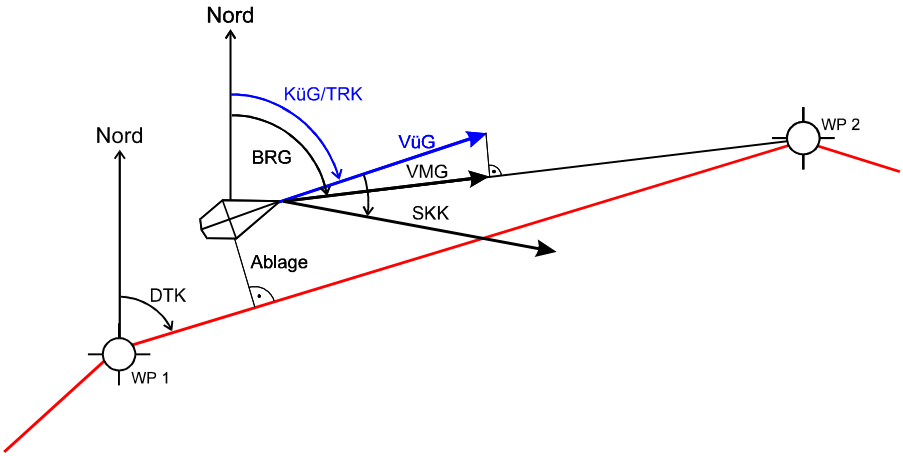
- Speed in direction of the next waypoint (Velocity made good) (VMG)
- Given course of the route section (Desired track) (DTK)
- Current course to the approached waypoint (BRG)
- Heading correction (SKK)
- Filing for route section (scale)

Arrival time 



In this instrument, **Vistanaut** shows the distance to the next waypoint and the estimated remaining running time until the waypoint is reached. This information will be updated along the way to the last waypoint of the route and the estimated remaining running time until the last waypoint of the route is reached. Finally, the estimated arrival time will be stated.

For clarification, the abbreviations displayed in the course pilot are entered in the following sketch.



Here, the abbreviations have the following meaning:

WP: Waypoint

COG: Course over ground

VüG: Speed over ground

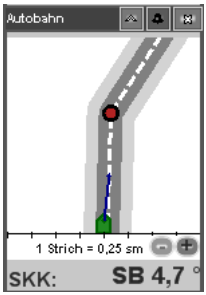
VMG: Speed, with which the waypoint will be approached (Velocity made good)

BRG: Course in direction of the approached waypoint, based on the actual position

DTK: Course of the connecting line between two waypoints (Desired track)

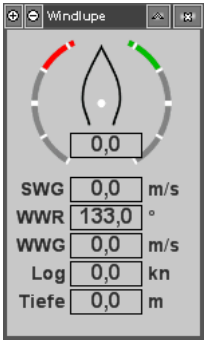
SKK: Heading correction; recommendation of how many degrees the actual heading should be changed towards portside or starboard, in order to approach the waypoint. Hereby, a course correction is recommended which is greater than the angular difference between COG and BRG and which guides you back on a curved path to your planned given course line.

„Highway display mode“ of given course data 



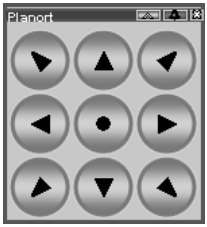
This instrument abstractly shows you the deviation from the given course.

Wind lens 



The wind lens displays data, which were provided by the NMEA output of the data bus – provided the output transmits the relevant information.

Change plan position 



This instrument shows a button field, over which the displayed sectional chart can be moved. It is primarily for the users of a touchscreen.

All instruments have in common, that they can be displayed also out of the course pilot. Each instrument has a window bar, in which up to three little buttons can be found:



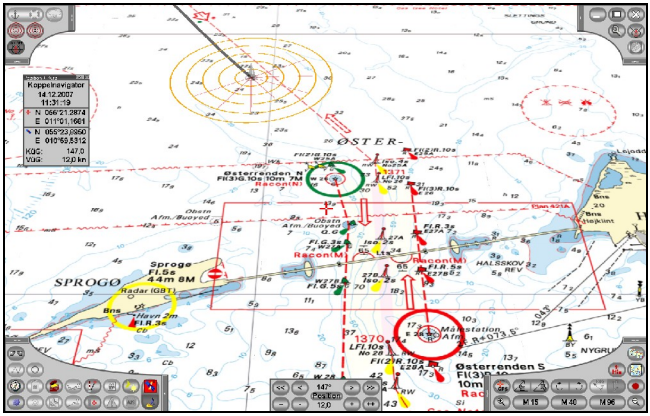
The instrument can be connected over the little rightmost cross.

By means of the symbol on the left, the instrument can be minimised in such a way, that only its window bar can be seen. A new click shows the instrument completely again.

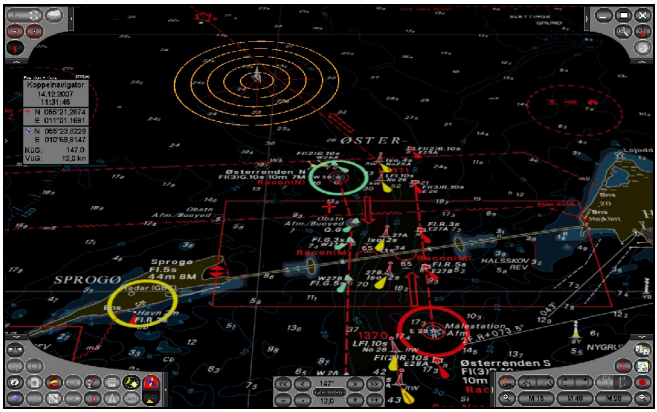
If the course pilot is open, the instrument can uncoupled from the course pilot by means of the middle symbol or inserted again into the course pilot.

Night vision mode 

By means of the button  in the control panel down left, the display can be changed between day and night.

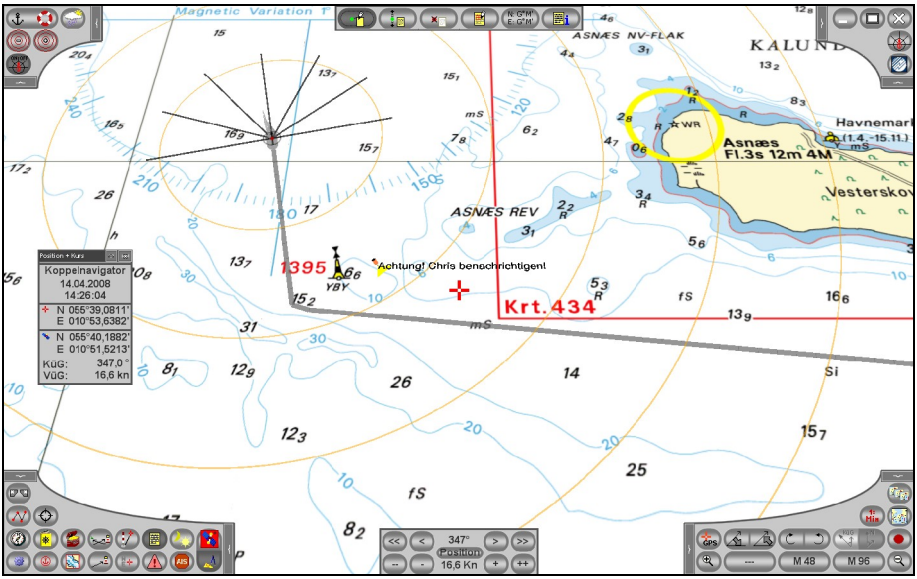


In the night vision mode, the control panels and menus will be darkened, and the chart will be displayed in different colours:



Text markings 

In **Vistanaut** own legends can be positioned directly on the chart.



The menu for editing text markings offers the following functions:

The button  allows to set a new text marking at a position, by clicking the left mouse button.

After selecting the button  a text marking can be moved when the left mouse button is pushed.

When the button  is activated, a text marking can be erased by clicking on it.

The function  allows editing a bookmark after clicking on it.

This button 

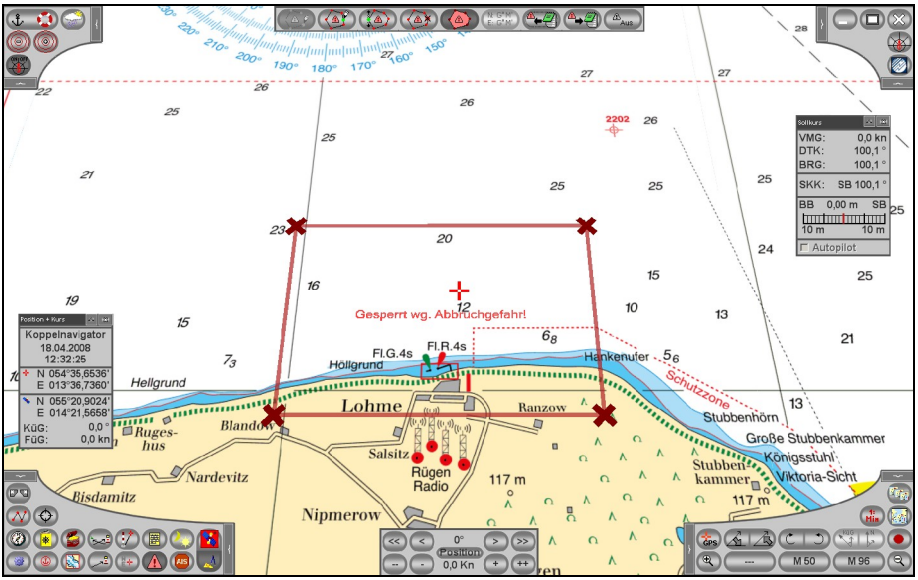
allows the setting of a bookmark, whereby the position is defined by entering coordinates.

After clicking the button  a mask will appear, in which all bookmarks are listed. From this mask, bookmarks can be erased or the sectional chart can be set on their position.

The operational settings (button  in the control panel at the top-right) provide the option to set whether text markings will be displayed while **Vistanaut** is running or not.

Alarm zones 

The menu for alarm zones was made to mark areas on the charts.



After requesting the menu, the corners of the zone can be set with the button  . The just-edited zone will be highlighted by a thick line with crosses at the corners. With  a corner can be inserted between two already existing points, with  a point can be moved and with  a point can be erased.  connects the last and the first point and closes the zone. The button  will finish editing the actual zone.

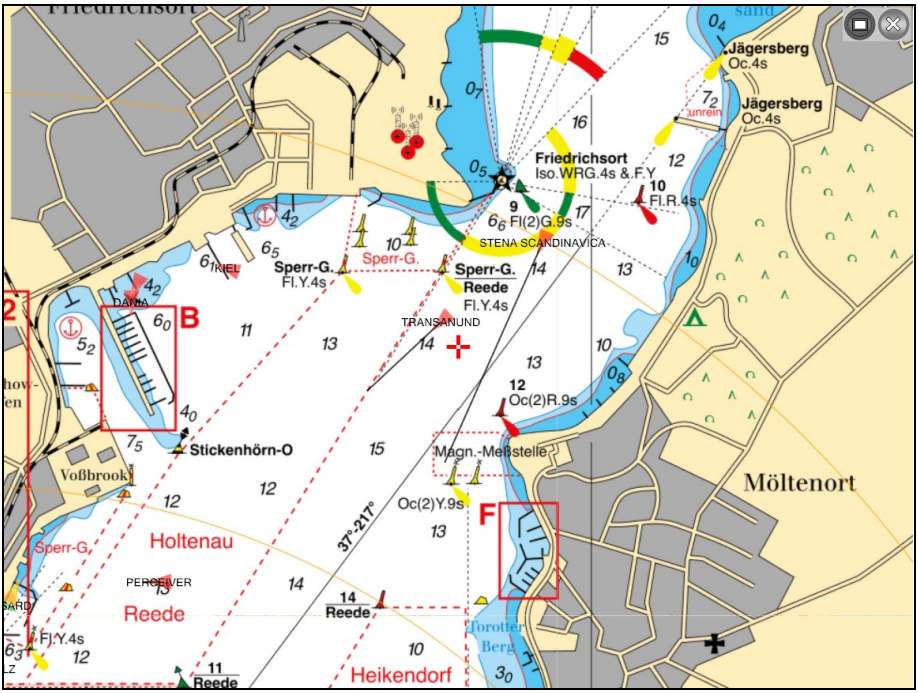
Pushing  will save the alarm zone. A description can be entered hereby. After that, the alarm zone will be displayed on the chart together with the description text in its centre. After this, the creation of a further alarm zone can be continued.

Saved alarm zones can loaded again later with the button  . After this, the loaded alarm zone is active and can be edited. If an alarm zone should be completely erased, this is possible after clicking  in the menu.

A setting can be made in the operational settings (button  in the control panel on the top-right), whether the alarm zones will be displayed while **Vistanaut** is running or not.

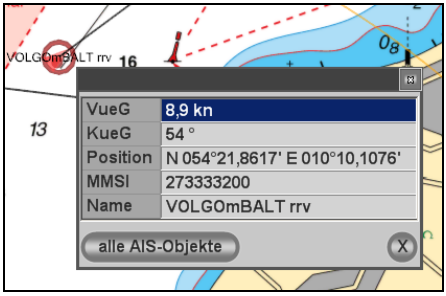
AIS reception

Vistanaut is able to interpret and to display the received AIS signals. The settings for the AIS receiver are carried out in the system settings (see below), where also the settings for the GPS receiver will be configured.

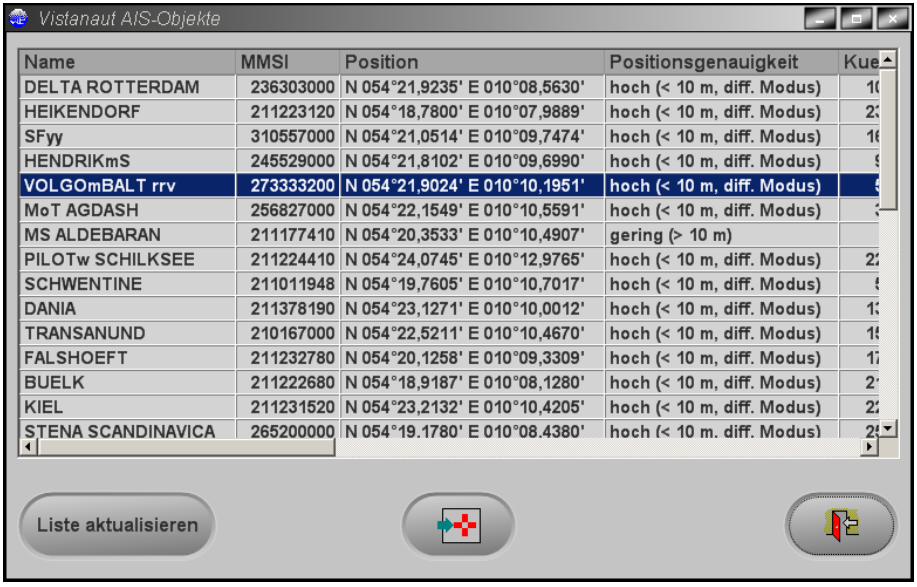


Each ship will be displayed as a small arrow with a heading vector. Hereby, for better clarity, the heading vector will be displayed only half as long as for the own ship. Ships within the radius of one nautical mile from the plan position will be highlighted in red. Ships without movement will be displayed in yellow. The remaining ships appear as a green arrow.

By clicking the left mouse button on an AIS object, the corresponding data can be displayed in a window:



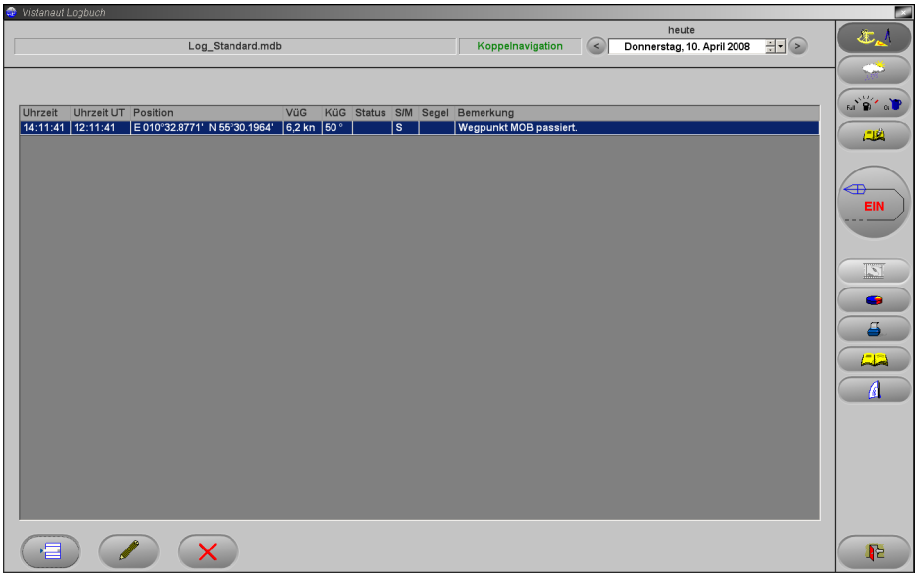
Via  a summary of all received AIS data can be displayed:



From here, after selecting an object, the plan position can be moved with  to its position.

Logbook 

Each **Vistanaut** logbook has different functions.



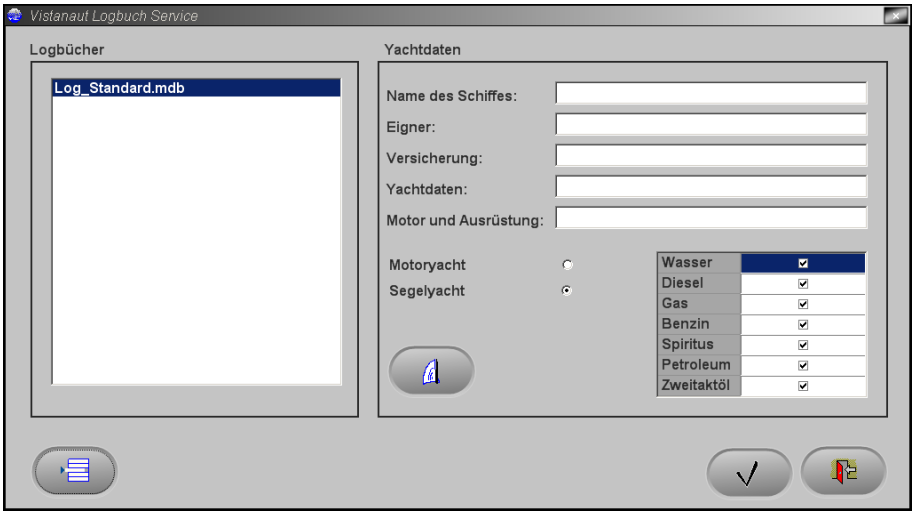
It includes a „ship's logbook", a „weather logbook", an „engineer's logbook" and an „ongoing logbook".

All logbook information are always related to the set date. The set date will be always displayed in the right upper corner of the logbook screen and can be modified there.

In which logbook the user currently is will be shown at the topleft corner. **Vistanaut** can administer different logbooks simultaneously, e.g., the individual logbooks for each trip can be created separately. It is also

possible, to create separate logbooks for different ships. For example, this is an advantage for charter operators.

By means of the button  the **logbook administration** will be reached: Here you can select which logbook you wish to use.

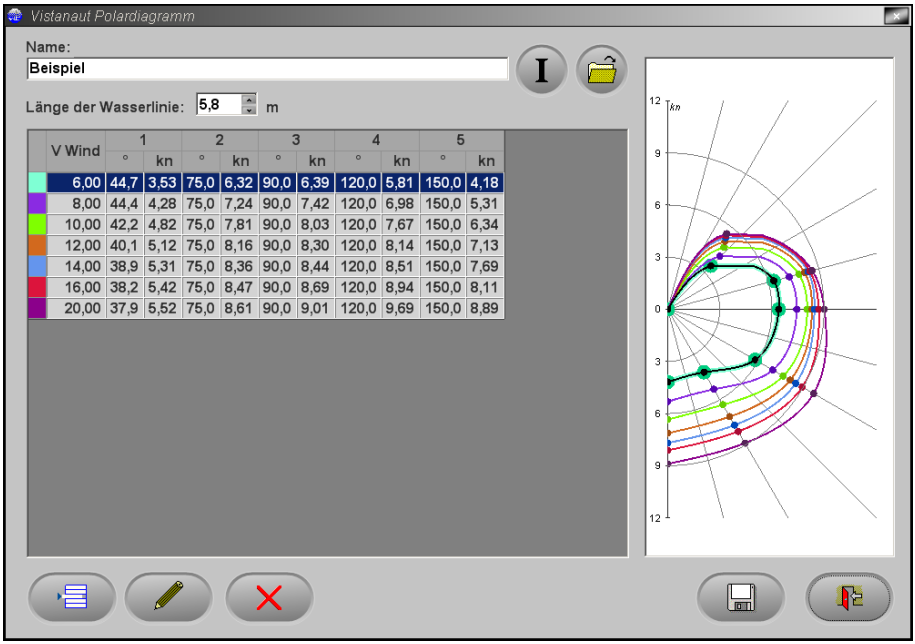


With the button  you can **create a new logbook**. The logbook „Log_Standard.mdb“ already exists. A meaningful name should be selected for the logbook – e. g. a combination of the ship's name and the starting date of the logbook.

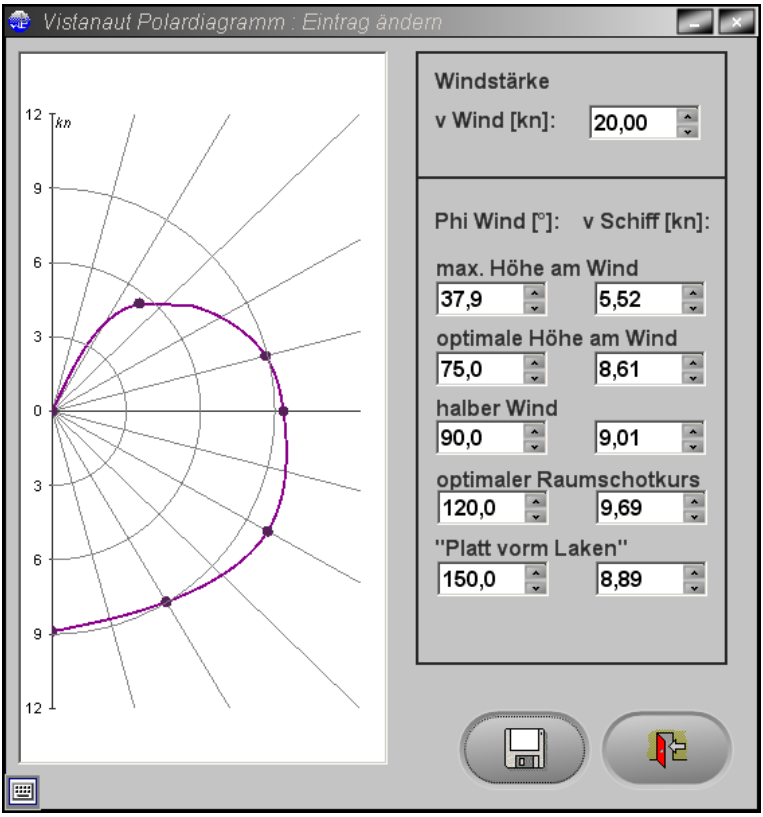
The yacht data can be entered for every logbook. For sailing yachts, this also includes one or several **polar coordinate diagrams**, which reflect the speed of the boat depending on wind force and wind direction and can be used for

route optimisation. When a new logbook is opened, it will be asked if already existing polar coordinate diagrams should be imported into the new logbook.

Pushing the button  will display the actual polar coordinate diagram.



By pushing the button  in this menu, a description of the displayed polar coordinate diagram can be added. Pushing the button  will open a menu, where the user can create a new, load an existing, or erase an existing polar coordinate diagram. Pushing the button  will insert a new curve into the shown diagram and by pushing the button  a curve can be edited:



After selecting the wind force, the ship speed can be indicated for five angles.

In the **Ship's Logbook**  all entries about positions, courses and sail handling will be added.

The button 

can only be activated when a valid GPS signal is available, or while navigating in coupled mode. The ship's position and some

other values will be automatically saved always when the position has changed by more than 50 metres. In normal operation, this **„trip recorder“** will not be noticed. With the recorded data, the sailing trip can be repeated later as often as required.

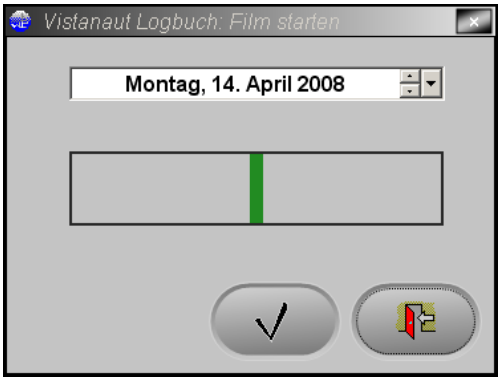
Besides this automatic function, manual recording can can be made anytime with the button  .

In the **Weather Logbook**  the pilot weather will be logged.

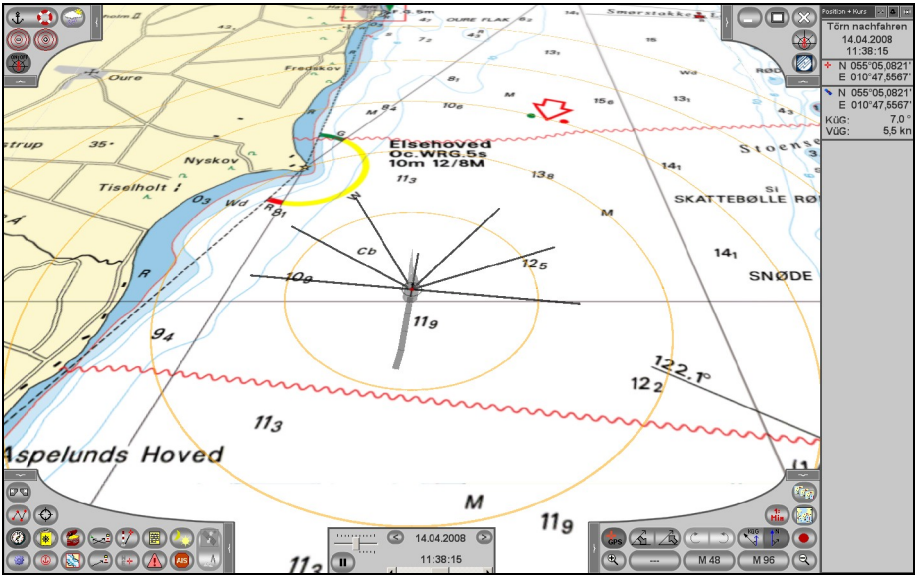
In the **Engineer's Logbook**  information about fuel and technical checkups will be recorded. In addition, comments about repairs can be filed here.

The **Ongoing Logbook**  is available for general daily remarks.

With the button  the recorded sailing trips can repeated once again on the chart. Activating the button will open the following mask:



By means of the date field, the day can be selected, when the tracking should begin. In the bar diagram will be displayed, for which period these daily recordings are available. The tracking begins with the selected day.



The tracking does not end until the stop-button is activated. This means, that now all sailing trip recordings can run successively, also for the whole vacation period or for the whole season.

By means of the button  statistics for the actual day can be retrieved. As long as the record during a sailing trip is still active, the values in the statistics will be determined from the beginning of the sailing trip upto the actual date. Here you can compare, for example, the miles already covered according to the log and over ground. The average speed can be read here too.

Harbour manual 

When the actual ship's position is near a harbour which is entered in the **Vistanaut** harbour manual, the harbour manual will open at the place on the screen, which belongs to this harbour.

When no information about the GPS position is available (e.g. presently no reception, device not connected or not activated), no specific harbour will be selected. The harbour, which is intended to be displayed, can be selected from the alphabetically sorted list.

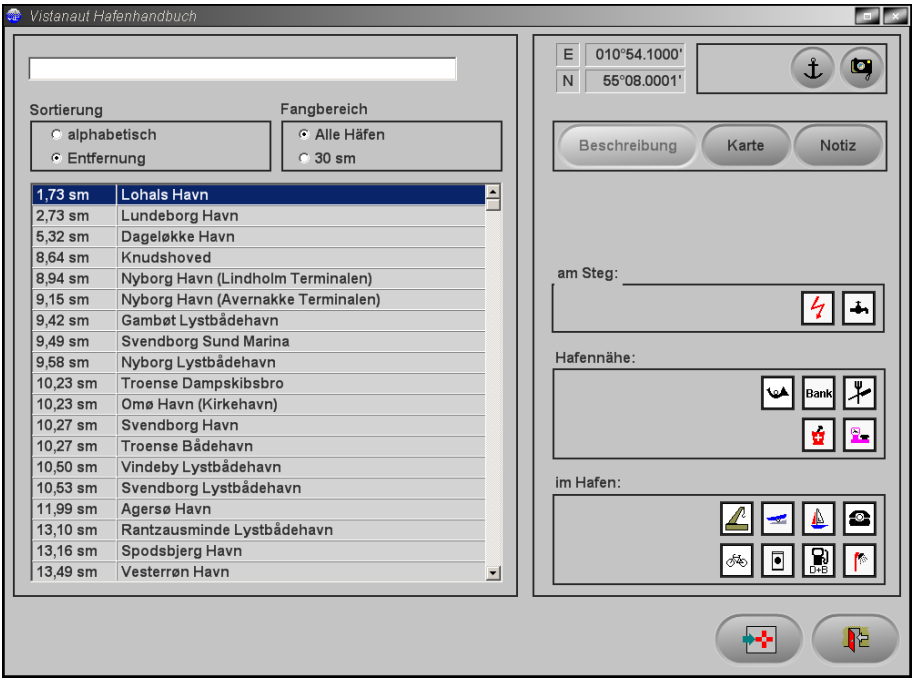
The harbour manual offers various information about a harbour.

This information can include the following details:

- harbour map (small chart)
- harbour picture (photo)
- a general information
- a description
- approaching tips
- information about water and electrical supply on the jetties
- information about harbour facilities
- information about facilities near the harbour

Not all information are always available.

After opening the harbour manual, the following mask appears:



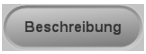
The sorting of the harbours can be done either alphabetically or according to the distance from the current position. The beginning letters of the harbour name can also be entered into the input box.

At the top-right in the harbour manual, up to seven buttons will be displayed. By clicking the mouse on these buttons, further information can be obtained:

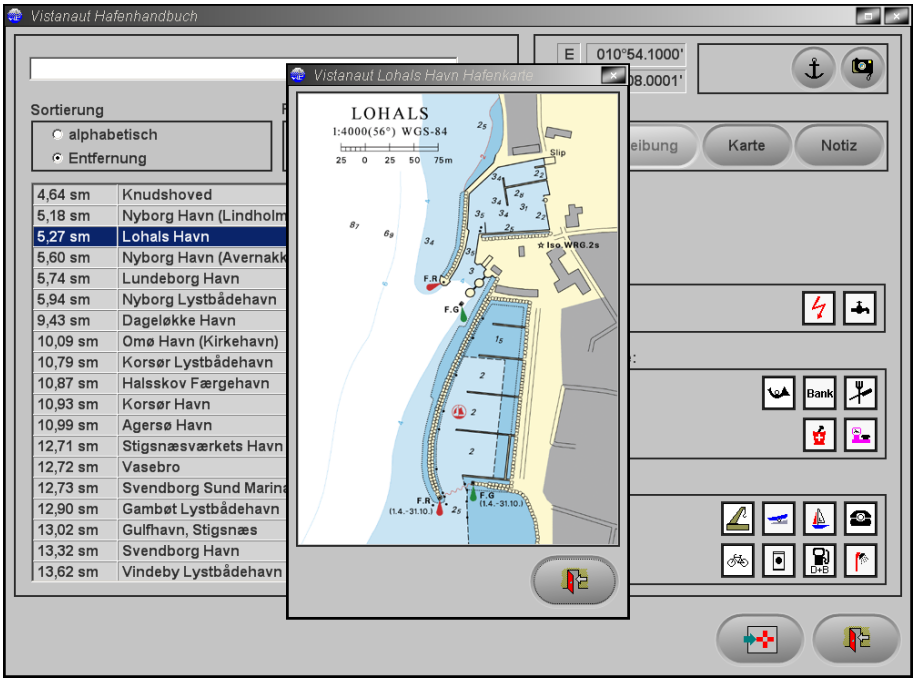
If available, the anchor  shows contact information such as phone number or e-mail.

The camera  shows, if available, a photo of the harbour.

The steering wheel  provides information for approaching the harbour.

The info button  and the button  provide additional information.

The appearance of a harbour map is activated by the button  .



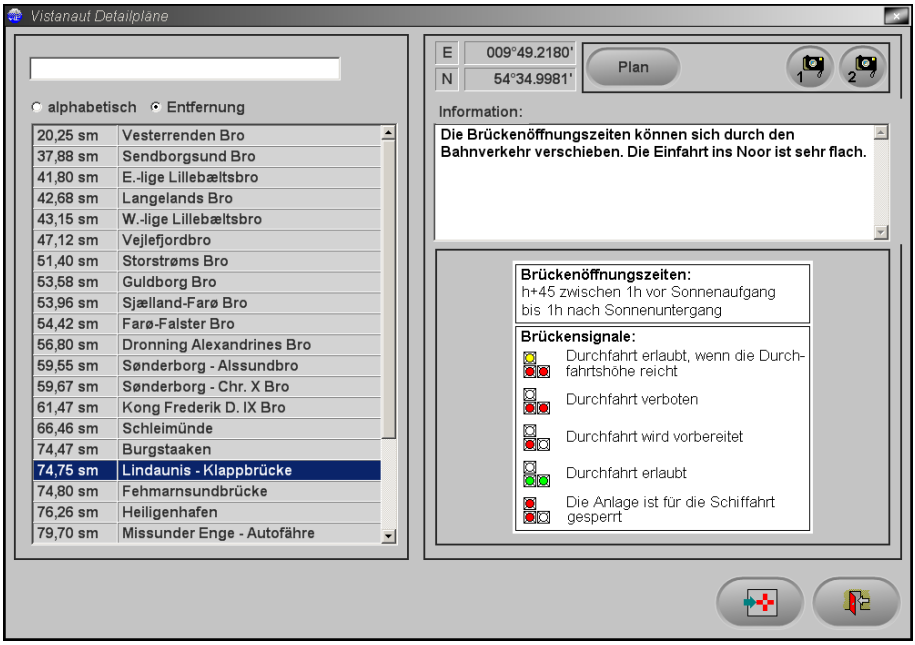
The button  is for opening an input box for own entries. These entries will not be affected in case of a later update of the harbour manual or of the software.

Even the icons on the right side of the harbour manual appear only when relevant information is available. They provide information bout the harbour facilities. The meanings of these icons are summarised in the treasure chest.

Pushing the button  will point to the position of the harbour in the chart display.

Detailed plans

Vistanaut includes a database, in which the detailed plans are administered separately from the harbour manual. The detailed plans are related to passage routes, bridges or bays.



Specific detailed plans are available in Delius Klasing's nautical chart sets for yachting, also as charts with own scale. When navigating with a „normal" GPS receiver, it should in no case be forgotten, that the expected GPS accuracy can result in a considerable visible deviation of the position displayed in the detailed chart. This problem is of minor significance when a DGPS system is used.

By means of the button 

the plan suitable to the detail can be displayed. If necessary, yacht data or more photographs can be displayed like in the harbour manual and the mask can be left by means of the button  and the sectional chart be set on the position of the detail.

Treasure chest 

The button  for opening the treasure chest menu is in the lower-left control panel. In the treasure chest, the system settings can be found and various information are concentrated. The individual areas will be activated by the following menu.



Traffic separation schemes 

Here you will find some useful information about the traffic separation schemes of the Baltic Sea.

Warning and firing areas 

At this place, some information about the warning and firing areas of the Baltic Sea are stored.

Fishery and fishing nets 

Behind this button, information about sea fishing and fishing areas can be found.

Weather chart 

This chart collects and summarizes some forecast values of the marine weather report and the names and positions of metorological offices.

Wind scale 

This wind scale includes the wind force in Beaufort, knots, metre per second and km/h.

Sea disturbance scale 

This scale includes the numerical strength of sea disturbances with a description.

Flags 

In this overview screen, the individual Flags are diplayed as a reminder.

Metorological offices 

Here you will find information about radio stations which are broadcasting maritime weather reports. Such information is available for the Baltic Sea catalogue.

Harbour manual icons 

The icons used in the harbour manual are available here including comments about their meaning.

Legend of the GRIB weather symbols 

The symbols used for the display of the GRIB weather data will be described here.

By means of the button  the mask for the administration of the polar coordinate diagrams (see logbook) will be invoked.

By means of the button  you can access the logbook administration (see above), where the ship's data can also be entered.

After selection of  the copyright and version notes about **Vistanaut** will appear.

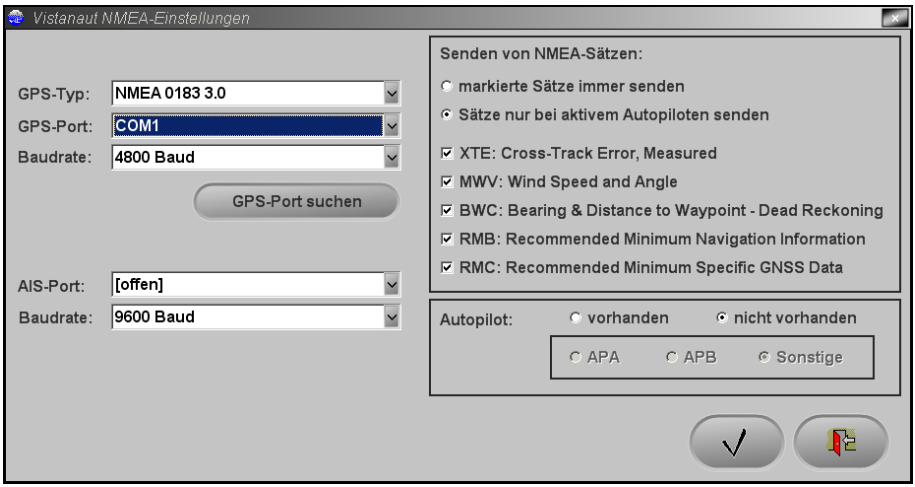
System settings

There are several alternatives to carry out settings for the **Vistanaut** application in the treasure chest. You can select the language, in which the **Vistanaut** masks and tool tips should be displayed. The languages German, English and Danish are available. Further settings will be described as follows.

Settings for the GPS receiver 

After selecting 

in the system settings, the hardware settings for the interfaces and the GPS receiver as well as for the AIS receiver can be carried out.



In this mask, you can select the NMEA standard, the serial interface at the PC, where the GPS receiver is connected, and the Baud rate. The necessary information can be gathered from the documentation of your GPS or AIS

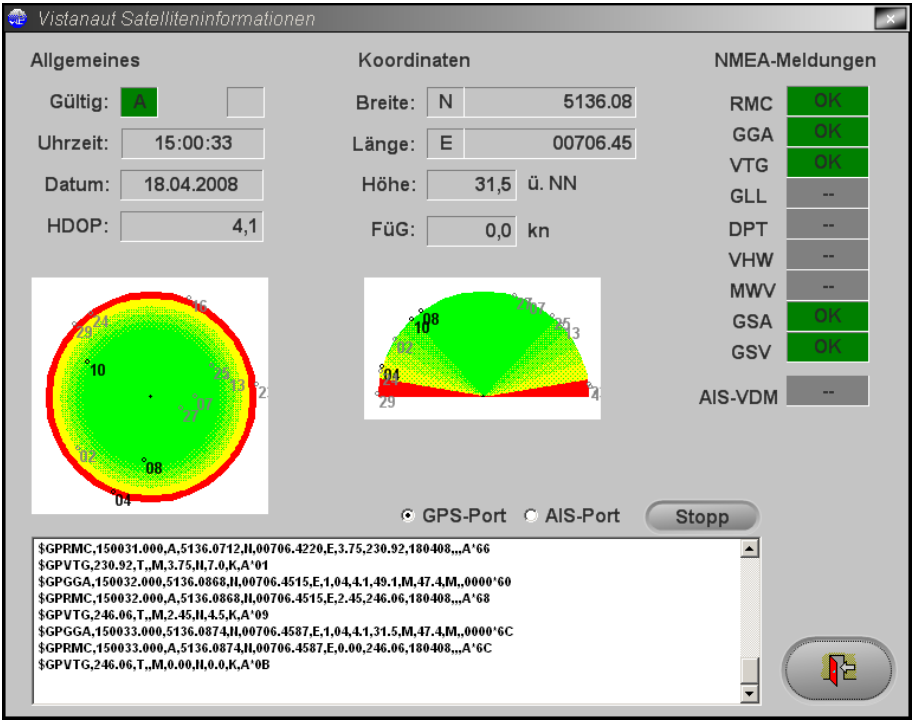
receiver. By clicking „Search GPS port“ you can prompt **Vistanaut** to search for the interface of the GPS receiver.

On the right side you can set which information should be *sent* to the GPS receiver. You can state if the GPS device has a Autopilot function and if Autopilot format A or B should be used.

By clicking  , the settings will be collected, and the menu will be exited with  , without storing the modifications.

Display of satellite status information 

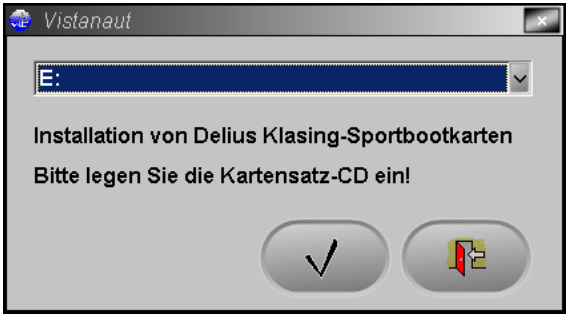
After selection of  the actual GPS status, which is transmitted from the GPS receiver, will be displayed. When no valid information is received, the relevant fields remain empty.



Import of Delius Klasing nautical charts for yachting 

By means of  , new chart sets (from volume 2008) from the Delius Klasing nautical charts for yachting series on CD or DVD can be imported.

The menu for selection of the CD or DVD drive will be displayed:



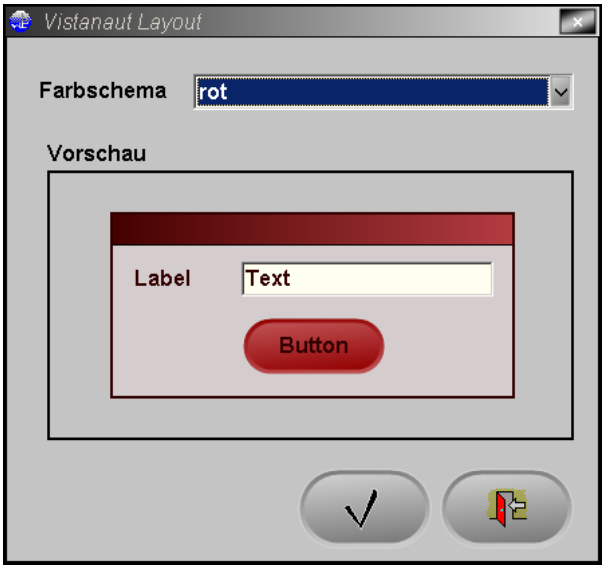
After inserting the chart set CD or DVD, the import can be started by clicking  .

The activation of copy-proof and encrypted chart sets will be automatically done during the chart set installation.

The catalogue charts will be automatically updated during the chart set installation.

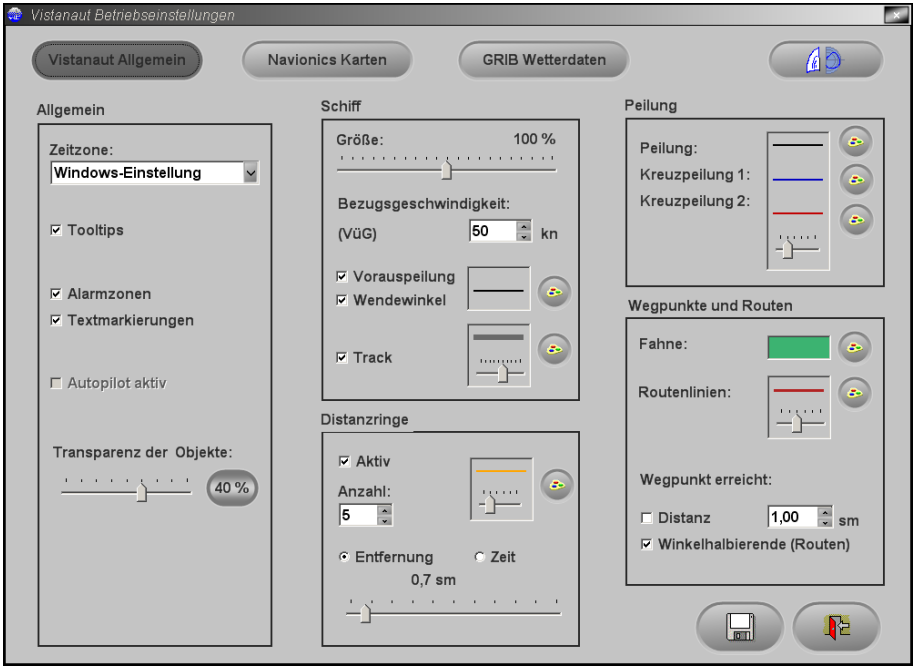
Setting the Vistanaut colour scheme 

After selection of  , a colour scheme can be automatically selected, in order to customise the appearance of **Vistanaut** according to the user's wishes:



Operational settings 

By clicking  at the upper-right control panel, the menu for the selection of the operational settings will be opened. Herein, many display elements of **Vistanaut** can be modified.



General settings

In operation, the time recording in **Vistanaut** takes place by GPS via the receiver. Here you can set the **time zone** as you wish to UT, MEZ or MESZ or accept the Windows settings.

You can select, if t**ooltips** should be displayed in the menus as a help function and if **text markings** as well as **alarm zones** should be displayed in the charts.

Here you can activate or deactivate the **Autopilot** function, when in the GPS settings of the system control (see above) the conditions for it are met.

The **transparency** of the 3-D objects in the chart display can be defined by means of a slider.

Ship's settings

The display of the ship can be modified in **size** and customised by means of the slider.

The heading vector of the ship in terms of its length will be indicated depending on the speed. So you can see through the vector changes, if the ship becomes faster or slower. A good support is also provided here by the spacer rings with a pre-defined distance. The reference speed depends on the average speed of the ship. When it is too low, the heading vector can become longer than the size of the screen. If it is selected too fast, then the heading vector under certain circumstances may become so small, that a reading is not possible anymore.

For sailing yachts, the **reference speed** should be close to the hull speed. For motoryachts, the reference speed should be close to the desired cruising speed.

Here you can also select, if **bow bearing** and **turning angle** should be displayed at all and if so, in which colour.

Furthermore, it can be defined, if and how the **track** (i. e. the course line) of the ship shall be displayed.

Spacer rings

There are two ways to define „spacer rings“ around the actual ship’s position. The **distance** of the rings can be either defined for a distance, or for a time. This means, the rings mark the point, which the ship at constant speed will probably reach according to the predefined time value. This circle applies also under the precondition that stream is available, as the distance will be calculated depending on the speed over ground. Besides the distance of the rings, the **number**, **line thickness** and **colour** of the rings can be defined here.

Another way to influence the display of bow bearing, turning angle and spacer rings, is offered by the buttons in the control panel top left:



By means of the button 

these details can be easily shown and hidden.

The buttons  and  allow to increase and to decrease the distance between the spacer rings.

Bearing, waypoints and routes

Here you can set the colour and line thickness for the display of these elements. It can be specified for waypoints, from which distance to the ship

Vistanaut will identify them as “reached”. You can also set, that a waypoint of a route will be defined as „reached“, when the angle bisector, resulting from the previous waypoint, the heading waypoint and the next waypoint, has been passed. If both options are marked, a waypoint is only then defined as „reached“, when the angle bisector has been passed in the required distance.

Navionics charts

In this screenmask you can define, which elements shall be displayed when using Navionics charts.

GRIB weather and stream data

Via the button you reach the operational settings for the GRIB weather and stream data. Here you can integrate GRIB data into **Vistanaut,** which are offered by WetterWelt GmbH (http://wetterwelt.de/vistanaut) especially for **Vistanaut**.

For both the weather and the stream data, different files are available, which must be imported separately. The selection of the GRIB file can be reached via the button  .



Attention, due to the extensive quantity of data, loading a GRIB file may need several minutes even on fast computers!

When you have integrated the GRIB data, you can select, if either the weather or the stream data will be displayed in the **Vistanaut** chart display after activating the button  . Furthermore, you can define if the weather data for wind, gusts, wave heights and weather symbols shall appear in the chart (provided that these data are included in the GRIB file).

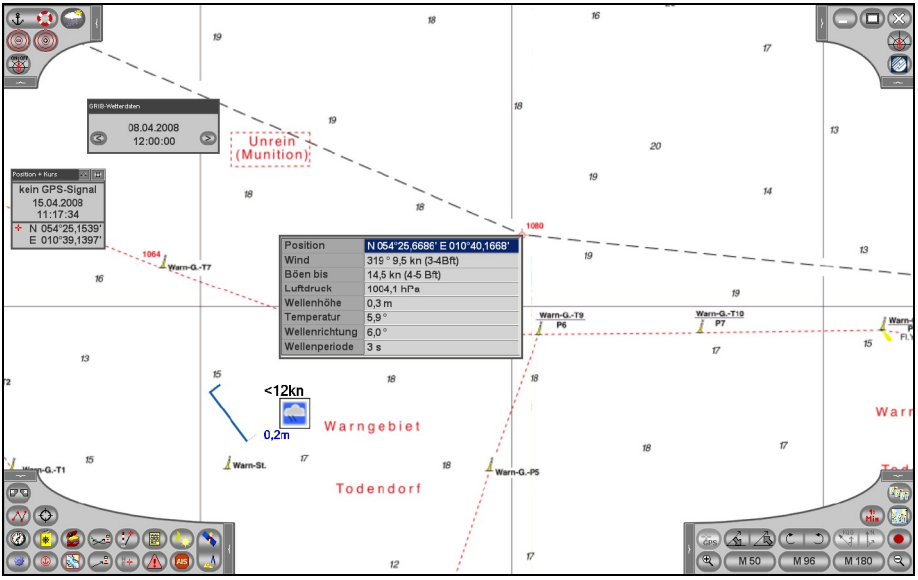
GRIB weather and stream data 

Vistanaut offers the option to dislay the GRIB data, which is especially made available by WetterWelt GmbH for **Vistanaut**. More information can be found in the internet on the following website of WetterWelt GmbH: http://www.wetterwelt.de/vistanaut

In order to display the GRIB data, it must be integrated into the operational settings (see above) first.

There you can also define, which data (weather or stream data) shall be shown.

By means of the button  you can then show and hide the GRIB data.



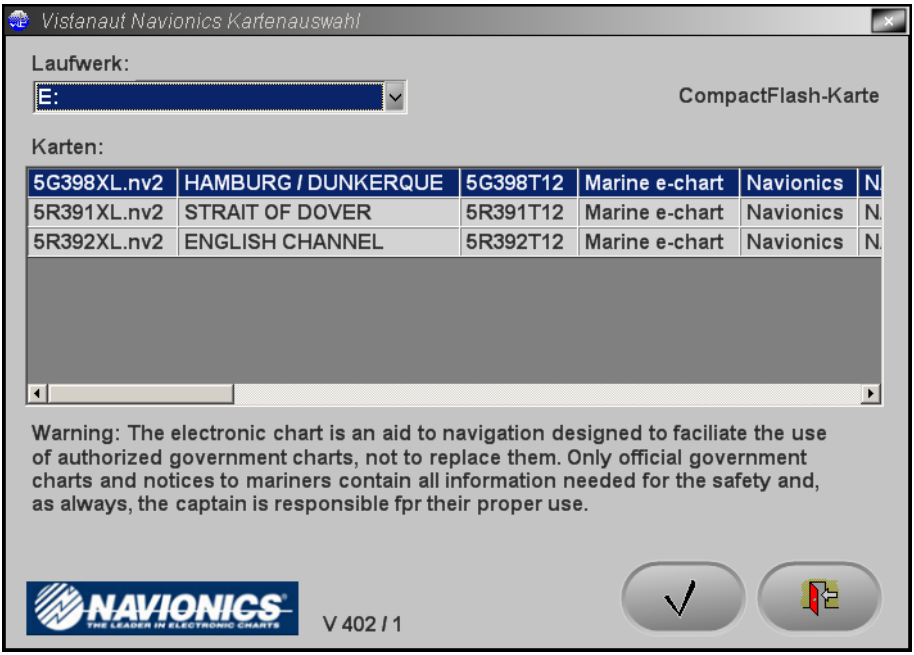
Explanatory notes for the used symbols can be found in the treasure chest.

By clicking the left mouse button, all data for the clicked position can be displayed in a window.

GRIB data always relates to a specific date. However, in a GRIB file the data for several dates of record can be saved. For this reason, a dialogue appears when the data is shown, where you can skip from one date of record to the next.

Navionics charts

Vistanaut allows you to use not only Delius Klasing nautical chart sets for yachting, but also Navionics charts. By means of the button in the upper-right control panel, you can change into the operating mode for Navionics chart data. After the first selection of this button, the menu for the selection of the Navionics chart set will be displayed:

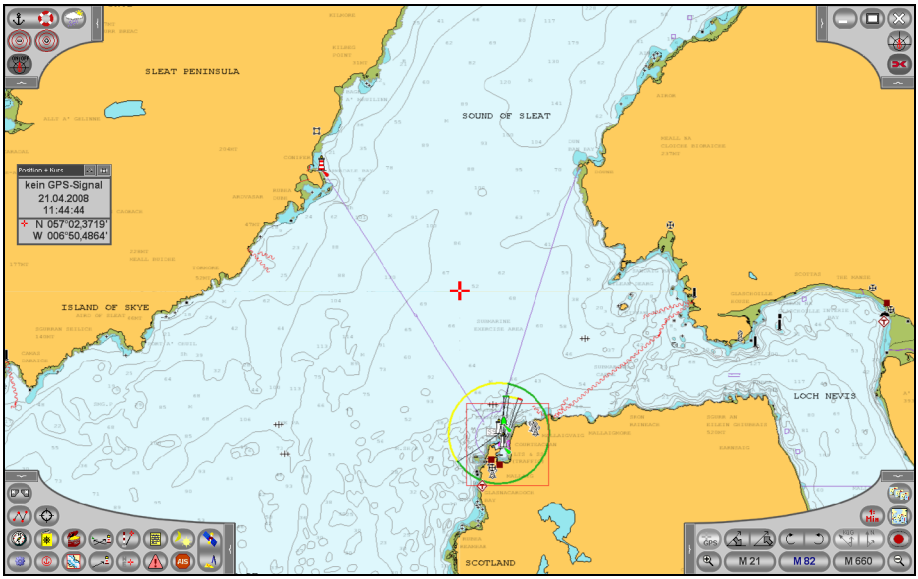


In this menu you can select from which drive you wish to load the data. **Vistanaut** searches all removable media devices for Navionics chart data and offers those drives for selection, where Navionics data was found. (The Navionics files must be in the folder „Navionic\Charts“ of the memory card.)

Note: When using Windows Vista in connection with SD memory cards in the Navionics card reading device, extremly long loading cycles were noticed. In this case we recommend to use CompactFlash memory cards.

All chart sets found on the drive will be shown in a list. You can load one of these chart sets.

When a chart set was loaded, the charts will be displayed in **Vistanaut** instead of the Delius Klasing nautical charts for yachting:



By means of the button  in the control panel at the bottom-right you can now select a general map, in which the selected chart set will be displayed by using a red frame.

If you wish to load another Navionics chart set later, you can select the menu via the catalogue selection  in the control panel at the bottom-right again.

In the control panel at the top-right you will now find the button  , which allows you to skip back for displaying of the Delius Klasing nautical charts for yachting.

The elements of a Navionics chart for display can be defined in the operational settings (button  in the control panel at the top-right).

Accuracy considerations GPS

A normal GPS receiver works with an accuracy of 5-50 m. The stated accuracy relates to a defined observation period of 24 hours.

Calculation and display of values

The **Vistanaut** application calculates internally all positions in degrees. Please note:

1° = 60’ 1’ = 60’’ 1’ = 1852 metres 1’’ = 30,867 metres

Abbreviations / terminology

Terminology	Definition:
Filing	distance between ship's position and course line (right angle) DTK
BRG	Course in direction of the approached waypoint, based on the actual position
Detailed chart	Enlarged detail from a coastal chart
DTK	Course of the connecting line between two waypoints (Desired track)
DGPS	Differential Global Positioning System
ETA	Calculated date for the arrival of a destination / waypoint
Day's run	Overground course in 24 hours (12:00 to 12:00)
GPS	Global Positioning System
Harbour plan	Detail enlargement of a harbour
Course	ACTUAL course, GIVEN course
COG	Course over ground
Course line	will be created during the entry of courses into a chart
Route	Way of the ship over ground
TC	True course
TBRG	True bearing
Sketch	Correct image in respect of content, but not necessarily to scale
SKK	Heading correction
SOG	Speed over ground
WP (waypoint)	Point in the nautical chart, which is marked by the geographical longitude and latitude
VMG	Speed in direction of arrival point (Velocity made good)